

Notice of Allowability

Application No.

10/720,692

Examiner

Heather A. Doty

Applicant(s)

MURAKAMI ET AL.

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment dated 2/24/2006.
2. ☒ The allowed claim(s) is/are 1, 2 and 5-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

DETAILED ACTION

Allowable Subject Matter

Claims 1, 2, and 5-15 are allowed.

The following is an examiner's statement of reasons for allowance:

Prior art does not teach or suggest, in combination with the other claimed limitations, that the electrode-forming sheet contains an alcohol-based solvent having 2 to 10% by weight of the electrode-forming sheet in the electrode-forming sheet while joining the electrode-forming sheet to a collector that has an adhesive on it.

Shibuya et al., the closest prior art of record, teaches adding alcohol to activated carbon, conductive carbon, and binder to form an electrode-forming sheet, but does not expressly teach that the electrode-forming sheet contains 2 to 10% by weight of alcohol when it is joined to the collector. As pointed out by Applicant, Shibuya et al. expressly teaches that there is very little moisture in the electrode-forming sheet (paragraph 0008), so it would not be obvious to optimize the amount of alcohol to arrive at Applicant's claimed range of 2 to 10% by weight, particularly since Applicant additionally teaches the criticality of using an alcohol content within this range (Figs. 2 and 3) for the purposes of the instant invention.

Ishikawa et al. (U.S. 6,638,385) also teaches adding alcohol to a carbonaceous material and a binder to form an electrode for an electric double-layer capacitor, but then teaches drying the electrode-forming sheet to remove some or all of the alcohol, and does not teach that 2 to 10% by weight alcohol remains in the electrode-forming sheet when it is joined to the collector.

Finally, Matsumoto et al. (JP 2000-323131) teaches forming a battery comprising the step coating a conductive electrode base material onto an electrode, wherein the conductive electrode base material comprises an active material and/or a conductive material, a binder, and a solvent, and then drying the coating until the content of the alcohol-based solvent becomes 10% by weight of the coating. However, Matsumoto et al. does not teach that the solvent is alcohol-based. Furthermore, this invention is not directed toward an electric double-layer capacitor, and the electrode formed in this manner is joined to a second electrode via an electrolytic layer, instead of to a collector sheet having a conductive adhesive, as claimed in the instant application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather A. Doty, whose telephone number is 571-272-8429. The examiner can normally be reached on M-F, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached at 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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